

## **FUZZY RELIABILITY OF A FAULT TREE MODEL USING INTUITIONSTIC FUZZY SETS**

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### **ABSTRACT**

Fault tree is an important tool to analyse the system Reliability. Present paper describes a new approach to evaluate the Reliability of a Fuzzy fault tree by using Intuitionstic Fuzzy sets. We have introduced a new distance method between intuitionstic fuzzy sets to determine the critical events and uncertainty contribution each one to the top event, using this method, the importance index is also calculated and compared with the weighed index. Numerical example is also given to illustrate the technique.

**Keywords:** Fuzzy Sets, Intuitionstic Fuzzy Sets, Triangular intuitionstic fuzzy numbers, Fuzzy Fault Tree Model, Minkawski's distance.

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